

## CLAIMS

What is claimed is:

- 1        1. A method for interfacing with a multi-level data structure comprising the steps
- 2        2 of:
  - 3            3 selecting a concept object stored in the multi-level data structure;
  - 4            4 displaying a first image representing the selected concept object;
  - 5            5 displaying one or more second images generally above the first image, each second
  - 6            6 image representing a parent concept object of the selected concept object;
  - 7            7 displaying a first connector connecting each second image to the first image;
  - 8            8 whenever the selected concept object has one or more child concept objects,
  - 9            9 displaying one or more third images generally below the first image, each third image
  - 10          10 representing a child concept object of the selected concept object, and displaying a second
  - 11          11 connector connecting each third image to the first image; and
  - 12          12 whenever the selected concept object has one or more lateral concept objects,
  - 13          13 displaying one or more fourth images generally on one or both sides of the first image, each
  - 14          14 fourth image representing a lateral concept object of the selected concept object, and
  - 15          15 displaying a third connector connecting each fourth image to the first image.

1           2.     The method as recited in claim 1 further comprising the steps of:  
2                 selecting a new concept object from either the selected concept object, the one or  
3     more parent concept objects, the one or more children concept objects or the one or more  
4     lateral concept objects;  
5                 displaying a fifth image representing the selected new concept object;  
6                 displaying one or more sixth images generally above the fifth image, each sixth image  
7     representing a parent concept object of the selected new concept object;  
8                 displaying a fourth connector connecting each sixth image to the fifth image;  
9                 whenever the selected new concept object has one or more child concept objects,  
10    displaying one or more seventh images generally below the fifth image, each seventh image  
11    representing a child concept object of the selected new concept object, and displaying a fifth  
12    connector connecting each seventh image to the fifth image; and  
13                 whenever the selected new concept object has one or more lateral concept objects,  
14    displaying one or more eighth images generally on one or both sides of the fifth image, each  
15    eighth image representing a lateral concept object of the selected new concept object, and  
16    displaying a sixth connector connecting each eighth image to the fifth image.

1           3.     The method as recited in claim 1 wherein the first, second, third and fourth  
2     images comprise text strings.

1           4.     The method as recited in claim 1 wherein the first image is highlighted.

1           5.     The method as recited in claim 1 wherein the first, second, third and fourth  
2     images, and the first, second and third connectors are displayed within a first viewing area.

1           6.       The method as recited in claim 5 further comprising the step of displaying one  
2       or more attributes of the selected concept object in a second viewing area.

1           7.       The method as recited in claim 5 further comprising the step of displaying one  
2       or more details of the selected concept object in a third viewing area.

1           8.       The method as recited in claim 5 further comprising the step of displaying one  
2       or more terms associated with the selected concept object in a fourth viewing area.

1           9.       The method as recited in claim 5 further comprising the step of displaying a  
2       work area for temporarily storing terms in a fifth viewing area.

1           10.      The method as recited in claim 5 further comprising the steps of:  
2       selecting either a microglossary panel, a term facet panel, a relations facet panel or a  
3       term phrase editor panel; and  
4       displaying the selected panel in a sixth viewing area.

1           11. A computer program embodied on a computer readable medium for  
2 interfacing with a multi-level data structure comprising:  
3           a code segment for selecting a concept object stored in the multi-level data structure;  
4           a code segment for displaying a first image representing the selected concept object;  
5           a code segment for displaying one or more second images generally above the first  
6 image, each second image representing a parent concept object of the selected concept  
7 object;  
8           a code segment for displaying a first connector connecting each second image to the  
9 first image;  
10          a code segment for whenever the selected concept object has one or more child  
11 concept objects, displaying one or more third images generally below the first image, each  
12 third image representing a child concept object of the selected concept object, and displaying  
13 a second connector connecting each third image to the first image; and  
14          a code segment for whenever the selected concept object has one or more lateral  
15 concept objects, displaying one or more fourth images generally on one or both sides of the  
16 first image, each fourth image representing a lateral concept object of the selected concept  
17 object, and displaying a third connector connecting each fourth image to the first image.

1           12. The computer program as recited in claim 11 further comprising:  
2           a code segment for selecting a new concept object from either the selected concept  
3           object, the one or more parent concept objects, the one or more children concept objects or  
4           the one or more lateral concept objects;  
5           a code segment for displaying a fifth image representing the selected new concept  
6           object;  
7           a code segment for displaying one or more sixth images generally above the fifth  
8           image, each sixth image representing a parent concept object of the selected new concept  
9           object;  
10          a code segment for displaying a fourth connector connecting each sixth image to the  
11         fifth image;  
12          a code segment for whenever the selected new concept object has one or more child  
13         concept objects, displaying one or more seventh images generally below the fifth image, each  
14         seventh image representing a child concept object of the selected new concept object, and  
15         displaying a fifth connector connecting each seventh image to the fifth image; and  
16          a code segment for whenever the selected new concept object has one or more lateral  
17         concept objects, displaying one or more eighth images generally on one or both sides of the  
18         fifth image, each eighth image representing a lateral concept object of the selected new  
19         concept object, and displaying a sixth connector connecting each eighth image to the fifth  
20         image.

1           13. The computer program as recited in claim 1 wherein the first, second, third  
2         and fourth images comprise text strings.

1           14. The computer program as recited in claim 1 wherein the first image is  
2 highlighted.

1           15. The computer program as recited in claim 1 wherein the first, second, third  
2 and fourth images, and the first, second and third connectors are displayed within a first  
3 viewing area.

1           16. The computer program as recited in claim 15 further comprising a code  
2 segment for displaying one or more attributes of the selected concept object in a second  
3 viewing area.

1           17. The computer program as recited in claim 15 further comprising a code  
2 segment for displaying one or more details of the selected concept object in a third viewing  
3 area.

1           18. The computer program as recited in claim 15 further comprising a code  
2 segment for displaying one or more terms associated with the selected concept object in a  
3 fourth viewing area.

1           19. The computer program as recited in claim 15 further comprising a code  
2 segment for displaying a work area for temporarily storing terms in a fifth viewing area.

1           20. The computer program as recited in claim 15 further comprising:  
2            a code segment for selecting either a microglossary panel, a term facet panel, a  
3 relations facet panel or a term phrase editor panel; and  
4            a code segment for displaying the selected panel in a sixth viewing area.

1           21. A system for interfacing with a multi-level data structure comprising:

2           a computer;

3           a display communicably connected to the computer;

4           a memory communicably connected to the computer for storing the multi-level data

5         structure;

6           a computer program resident on the computer for:

7               selecting a concept object stored in the multi-level data structure,

8               displaying a first image representing the selected concept object on the

9         display,

10              displaying one or more second images generally above the first image on the

11         display, each second image representing a parent concept object of the selected

12         concept object and displaying a first connector on the display connecting each second

13         image to the first image,

14              whenever the selected concept object has one or more child concept objects,

15              displaying one or more third images on the display generally below the first image,

16              each third image representing a child concept object of the selected concept object

17              and displaying a second connector on the display connecting each third image to the

18         first image, and

19              whenever the selected concept object has one or more lateral concept objects,

20              displaying one or more fourth images on the display generally on one or both sides of

21         the first image, each fourth image representing a lateral concept object of the selected

22         concept object and displaying a third connector on the display connecting each fourth

23         image to the first image.

1           22. The system as recited in claim 21 wherein the computer program:

2           selects a new concept object from either the selected concept object, the one or more

3   parent concept objects, the one or more children concept objects or the one or more lateral

4   concept objects;

5           displays a fifth image on the display representing the selected new concept object;

6           displays one or more sixth images on the display generally above the fifth image,

7   each sixth image representing a parent concept object of the selected new concept object;

8           displays a fourth connector on the display connecting each sixth image to the fifth

9   image;

10          whenever the selected new concept object has one or more child concept objects,

11   displays one or more seventh images on the display generally below the fifth image, each

12   seventh image representing a child concept object of the selected new concept object, and

13   displays a fifth connector on the display connecting each seventh image to the fifth image;

14   and

15          whenever the selected new concept object has one or more lateral concept objects,

16   displays one or more eighth images on the display generally on one or both sides of the fifth

17   image, each eighth image representing a lateral concept object of the selected new concept

18   object, and displays a sixth connector on the display connecting each eighth image to the fifth

19   image.

1           23. The system as recited in claim 21 wherein the first, second, third and fourth

2   images comprise text strings.

1           24. The system as recited in claim 21 wherein the first image is highlighted.

1           25.     The system as recited in claim 21 wherein the first, second, third and fourth  
2     images, and the first, second and third connectors are displayed within a first viewing area.

1           26.     The system as recited in claim 25 wherein the computer program displays one  
2     or more attributes of the selected concept object in a second viewing area.

1           27.     The system as recited in claim 25 wherein the computer program displays one  
2     or more details of the selected concept object in a third viewing area.

1           28.     The system as recited in claim 25 wherein the computer program displays one  
2     or more terms associated with the selected concept object in a fourth viewing area.

1           29.     The system as recited in claim 25 wherein the computer program displays a  
2     work area for temporarily storing terms in a fifth viewing area.

1           30.     The system as recited in claim 25 wherein the computer program:  
2         selects either a microglossary panel, a term facet panel, a relations facet panel or a  
3     term phrase editor panel; and  
4         displays the selected panel in a sixth viewing area.